AMENDMENT TO THE DRAWINGS

Fig. 7 is amended according to the substitute copy provided herewith. In decision block 62,

the word PRIMARY was inadvertently included in the original and has been deleted.

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WEINGARTEN, SCHURGIN,
GAGNEBIN & LEBOVICI LLP
TEL. (617) 542-2290
FAX. (617) 451-0313

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REMARKS

Claims 1-16 are pending in the present patent application and stand subject to a non-final rejection. Claims 1, 3-7, and 10-12 are currently amended, while claims 2, 8-9, and 13-16 are in their original form.

Claims 1 and 2 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Pat. No. 6,934,762 to Lange et al. (hereinafter "Lange") in view of U.S. Pat. No. 6,262,976 to McNamara (herein after McNamara) and U.S. Pat. No. 6,058,429 to Ames (hereinafter "Ames"). It is noted that the patent number for Lange was inadvertently cited on Page 2 of the Office Action as 6,751,191.

The Examiner alleges that Lange teaches all aspects of claim 1 "except for: having a destination address at the ISO datalink layer 2; and replacing, in the data packet, the destination address with a device datalink address identifying a device capable of providing said connection; whereby said replacing of said destination address with said device datalink address enables a transmittal of said received data packet."

The Examiner refers to McNamara for the premise that "the general concept of having a destination address at the ISO data link layer 2 is well known in the art." Applicant disagrees with the Examiner's apparent position that one of ordinary skill in the art at the time the invention was made would have chosen to modify Lange to include the use of datalink layer address rewriting to forward data packets, as discussed below.

Finally, the Examiner refers to Ames as disclosing: "replacing, in said data packet, said destination address with a device datalink address identifying a device capable of providing said connection; whereby said replacing of said destination address with said device datalink address enables a transmittal of said received data packet."

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Ames involves the use of a "learning internetwork switch" that is intermediate: (1) multiple virtual local area networks (VLANs), on the one hand; and (2) a router, on the other. As data packets flowing between the router and devices associated with the VLANs pass through the switch, the switch learns the respective port and network layer and datalink layer addresses of the respective devices.

In this configuration, a data packet, sent from a source device in one VLAN to a destination device in a different VLAN, normally has the data packet datalink layer destination address set to the router datalink layer address. Rather than require the data packet to pass through to the router and then back through the switch on the way to the destination device, the switch recognizes the network layer destination address as one associated with a VLAN directly connected thereto and changes the datalink layer address of the data packet from that of the router to that of the destination device. "The proxy forwarding mechanism then transmits the packet through the port to which the second device is connected." (Ames, col. 3, ll. 47-49).

Applicant respectfully submits that one skilled in the art at the time of the presently claimed invention would not have thought to combine the teachings of Lange and Ames, let alone be able to do so to achieve the claimed invention.

The backup system of Lange is premised upon network layer redirection, enabled through the periodic polling of the connected primary and backup routers according to the Border Gateway Protocol (BGP). (*See,* Lange, col. 5, ll. 8-10). "In the event of any of the failures noted above that disables the primary Internet connectivity, data traffic is automatically routed from primary router 105 to backup router 210 to provide backup Internet connectivity." (Lange, col. 5, ll. 12-16). Thus, any data packet sent to the primary router with a network address associated with the Internet will

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be routed directly to the backup router via a port-based connection learned through BGP periodic polling.

Ames, on the other hand, teaches that a switch must intercept a data packet, examine the network layer destination address to identify a corresponding destination device, modify the datalink layer address to that of the destination device, then forward the data packet via a port-based connection learned by observing prior instances of destination device-related communications.

Were one to attempt to modify the teaching of Lange on the basis of Ames, it would be necessary for the primary router to know the datalink layer address of the secondary router. Ames discloses monitoring data packet traffic to learn the association between network layer address, datalink layer address, and switch port. Ames would thus provide no mechanism for the primary router of Lange to learn the destination address of the secondary router since no traffic passing through the primary router of Lange is ever intended for the backup router.

Even if one were to ignore this omission in the combined teachings of Lange and Ames, which omission Applicant submits is enough to defeat the Examiner's case of *prima* facie obviousness pursuant to 35 U.S.C. §103(a), there remains the fact that the amended claims require that the data packet be delivered to the backup access device, over the first network, on the basis of the modified datalink layer address, whereas both Lange and Ames deliver the modified data packet via port-based switching (see the foregoing quote from Ames). Thus, because neither reference teaches or discloses the use of data packet delivery via the modified datalink destination address over the first network, the suggested combination of the two references also fails to disclose the claimed method and system.

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Claim 2 is believed to be allowable at least on the basis of depending from allowable base claim 1.

Claims 3-5 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lange, Ames, and McNamara in view of U.S. Pat. No. 6,108,345 to Liping Zhang (hereinafter Liping Zhang).

Claims 3-5 and 14 depend either directly or ultimately from claim 1, which, as noted above, is believed to be allowable over the combination of Lange, Ames, and McNamara. Applicant submits that the Liping Zhang reference does not remedy the aforementioned deficiencies of the Lange, Ames, and McNamara references (or proper combinations thereof), and thus claims 3-5 and 14 are allowable on at least the basis of depending directly or ultimately from allowable base claim 1.

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Lange, McNamara, Ames, and Liping Zhang, further in view of the IEEE publication of Katsube et al. (hereinafter Katsube). As indicated above, claim 10 has been amended to clarify that the direct ISO layer 2 datalink connection between the primary access device and the backup access device is via the first network.

Claim 10 depends ultimately from claim 1, which, as noted above, is believed to be allowable over the combination of Lange, Ames, and McNamara. Applicant submits that neither the Liping Zhang reference nor the Katsube reference, alone or in combination, remedies the aforementioned deficiencies of the Lange, Ames, and McNamara references (or proper combinations thereof), and thus claim 10 is allowable on at least the basis of depending ultimately from allowable base claim 1.

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In addition, the Examiner suggests that Lange discloses a direct connection between the primary access device and the backup access device by reference to the front page diagram showing a line between the primary router 105 and the secondary router 210. The Examiner's point is in agreement with Applicant's assertion above: because Lange discloses a router to router connection, necessary for the implementation of BGP, it differs from the claimed method involving the retransmission of the data packet by the primary access device to the backup access device over the first network, where the first network is an ISO layer 2 datalink connection. As discussed in Lange, BGP is employed to make the two routers aware of each other's addresses and port assignments over this direct connection.

Claim 10, in contrast, requires a direct ISO layer 2 datalink connection via the first network between the primary access device and the backup access device. In the present application, this is illustrated in Figure 5 as the Ethernet-like Network 36. In Lange, though an Ethernet network 103 is illustrated in communication with both the primary and backup routers 105, 210, the backup technique discussed therein relies upon BGP, which requires a non-datalink, port-based connection therebetween, not an ISO 2 datalink (e.g. Ethernet) connection.

The Examiner refers to Katsube for the premise that the provision of a direct datalink connection is known in the art. Even assuming, purely for the sake of argument, that this assertion is correct, it is nevertheless Applicant's position that an abstract teaching of the use of a datalink layer connection is irrelevant unless it would have been apparent to one skilled in the art that the abstract teaching could be directly applied to Lange. Lange requires a port-based, network layer direct connection between the two routers. Ames also requires a port-based connection in order to forward a data packet across a second network (not the first network) to a destination device. Thus,

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WEINGARTEN, SCHURGIN,
GAGNEBIN & LEBOVICI LLP
TEL. (617) 542-2290
FAX. (617) 451-0313

neither Lange nor Ames illustrates any need for or teaching of how to utilize a direct datalink connection in a system according to either reference or some proposed combination thereof.

Claims 11, 12, and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lange and Ames. Claim 11 has been amended to clarify that the primary access device is connected to the backup access device via the first network and that the primary access device is for transmitting the incoming data packet, with the replaced destination address, to the backup access device over the first network. For the foregoing reasons, it is Applicant's position that Lange, alone or in combination with Ames, fails to teach, at least, the connection between the primary access device and the backup access device or that the primary access device is for transmitting a data packet, having a replaced destination address, to the backup access device over the first network.

Claims 12 and 13 are thus believed to be allowable at least on the basis of being dependent from allowable base claim 11.

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Lange, Ames, McNamara, and Liping Zhang, further in view of U.S. Pat. No. 6,397,260 to Wils et al. (hereinafter Wils). Despite any proposed teaching of the performance of an ARP request in Wils, absent a teaching of the method of independent claim 1, Wils in combination with the remaining cited references fails to anticipate claim 7.

Claim 6 stands rejected under 35 U.S.C. §103(a) as being anticipated over Lange, Ames, McNamara, Liping Zhnag, and further in view of U.S. Pat. No. 6,298,063 to Coile et al. (hereinafter Coile).

Claim 6, as amended, depends directly from claim 1, which, as noted above, is believed to be allowable over the combination of Lange, Ames, and McNamara. Applicant submits that neither

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WEINGARTEN, SCHURGIN,
GAGNEBIN & LEBOVICI LLP
TEL. (617) 542-2290
FAX. (617) 451-0313

PAGE 14/18 * RCVD AT 5/20/2008 3:35:35 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/43 * DNIS:2738300 * CSID:16174510313 * DURATION (mm-ss):03-00

the Liping Zhang reference nor the Coile reference, alone or in combination, remedies the aforementioned deficiencies of the Lange, Ames, and McNamara references (or proper combinations thereof), and thus claim 6 is allowable on at least the basis of depending directly from allowable base claim 1.

Claim 8 stands rejected under 35 U.S.C. §103(a) over Lange, Ames, McNamara, Lipin Zhang, and further in view of U.S. Pat. No. 6,715,098 to Chen (hereinafter Chen).

Claim 8 depends ultimately from claim 1, which, as noted above, is believed to be allowable over the combination of Lange, Ames, and McNamara. Applicant submits that neither the Liping Zhang reference nor the Chen reference, alone or in combination, remedies the aforementioned deficiencies of the Lange, Ames, and McNamara references (or proper combinations thereof), and thus claim 8 is allowable on at least the basis of depending directly from allowable base claim 1.

Claim 9 stands rejected under 35 U.S.C. §103(a) over Lange, Ames, McNamara, Lipin Zhang, and further in view of U.S. Pat. No. 6,012,088 to Li et al. (hereinafter Li), U.S. Pat. No. 7,058850 to Cochran (hereinafter Cochran) and U.S. Pat. No. 6,968,389 to Menditto (hereinafter Menditto).

Claim 9 depends ultimately from claim 1, which, as noted above, is believed to be allowable over the combination of Lange, Ames, and McNamara. Applicant submits that none of the Liping Zhang, Li, Cochran, or Menditto references, alone or in combination, remedies the aforementioned deficiencies of the Lange, Ames, and McNamara references (or proper combinations thereof), and thus claim 9 is allowable on at least the basis of depending directly from allowable base claim 1.

Claim 15 stands rejected under 35 U.S.C. §103(a) over Lange and Ames in view of Li.

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Claim 15 depends directly from claim 11, which, as noted above, is believed to be allowable over the combination of Lange and Ames. Applicant submits that the Li reference does not remedy the aforementioned deficiencies of the Lange and Ames (or proper combinations thereof), and thus claim 15 is allowable on at least the basis of depending directly from allowable base claim 11.

Claim 16 appears to stand rejected under 35 U.S.C. §103(a) over Lange and Ames in view of Li.

Claim 16 depends directly from claim 11, which, as noted above, is believed to be allowable over the combination of Lange and Ames. Applicant submits that the Li reference does not remedy the aforementioned deficiencies of the Lange and Ames (or proper combinations thereof), and thus claim 16 is allowable on at least the basis of depending directly from allowable base claim 11.

With regard to the **"Summary of Arguments and Response"** found on pages 18 and 19 of the office action, Applicant is unsure how to correlate the various "Points" to Applicant's prior response.

None of the amendments or remarks made in this response are to be viewed as a concurrence with any of the grounds for rejection put forth by the Examiner in the pending office action. Where Applicant has asserted patentability on the basis of a claim being dependent from an allowable base claim, Applicant does not necessarily accede to the bases for rejecting the dependent claim and reserves the right to substantively traverse the rejections should it be necessary in a further response.

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In view of the foregoing amendments and remarks, the Examiner is respectfully requested to reconsider the rejections and allow the claims. If a telephone conference would be of use in forwarding the present application towards allowance, the Examiner is invited to contact Applicant's representative at the telephone number listed below.

Respectfully submitted,

GORDON ROULEAU

By: _____

Gordon R. Moriarty
Registration No. 38,973
Attorney for Applicant

WEINGARTEN, SCHURGIN,
GAGNEBIN & LEBOVICI LLP
Ten Post Office Square
Boston, MA 02109.
Telephone: (617) 542-2290
Telecopier: (617) 451-0313

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WEINGARTEN. SCHURGIN,
GAGNEBIN & LEBOVICI LLP
TEL. (617) 542-2290
FAX. (617) 451-0313